## U.S. ARMY COMMAND AND GENERAL STAFF COLLEGE

### Appendix 1 to Stagesetter Advance Sheet
### "Describing the International Security Environment:  The Clash of Ideas"
### by LTC Robert D. Walz, USA (Ret)

Unlike the "comfortable" years of the Cold War, today's strategic environment is filled with complexities and uncertainties.  Just as there were analysts who explained the Cold War environment, there are analysts who are attempting to explain today's environment.  Beyond macro level analysis of the strategic environment, there are various global and regional forces and trends that need to be explored for us to begin to understand the environment with which national security policy makers must cope.  However, unlike the Cold War period, there is great divergence of views.  Chief among these analysts are Samuel Huntington, Alvin and Heidi Toffler, and Robert Kaplan.  This article and the succeeding ones will synthesize some of the various views.  For greater understanding, studying the original authors, supporters, and critics is strongly recommended.

### THE TOFFLERS' "CLASH OF CIVILIZATIONS"

With the publication of *War and Anti-War*, renowned futurists Alvin and Heidi Toffler attempted to burst the bubble of the optimists who predicted an era of lasting peace and purely economic competition.  They suggested that "…the terrifying truth is that the era of marginalized murder, when all wars were fought by small states in faraway places, may be screeching to an end."[i]

Their analysis is based on their theory of waves of history first published in their book *Future Shock* (1970).  They believe that there have been three "waves" in the history of humanity.  When these waves of change "crash in on one another, powerful crosscurrents are unleashed."[ii] The clashing of these waves of history is the Tofflers' "clash of civilizations." The Tofflers define civilizations in technological terms.  The First Wave is the agrarian wave by which primitive nomadic tribal groups were replaced by farmers tied to the land.  This agricultural revolution tied people to the land, and even today there are many people and thus civilizations tied to the land.[iii] The Tofflers choose the hoe as the conceptual representation of the agrarian First Wave civilization.

The Second Wave is the industrial revolution.  The new technology caused all the institutions of Western Europe to change, forming a new system based on mass production, mass consumption, mass education, and mass media—all of which were linked and served by institutions such as schools, corporations, and political parties.  The family structure even changed from the extended family to the nuclear family.  However, this revolution did not occur peacefully.  According to the Tofflers, the change was fought bitterly by First Wave landowners who often were in alliance with the church.  As farmers were forced off the land to provide labor for the new factories, strikes, revolts, civil wars, border disputes and nationalist uprisings erupted between the interests of the First Wave and Second Wave proponents.  This pattern was repeated in almost every industrializing country, e.g., the Civil War in the United States,

the Meiji "Restoration" in Japan.  As more countries industrialized, the conflict moved to a race for colonies as the Second Wave nation-

states (a creation of the Second Wave) came to dominate the remaining First Wave states and tribal units in Asia and Africa.  The result, as the

Tofflers point out, is that Second Wave elites won the struggle for power within their own countries and ultimately the larger struggle for world power.[iv] The Tofflers chose the assembly line as the conceptual representation of the Industrial Wave.

Until the arrival of the Third Wave, the Tofflers saw a bisected world that set the framework for most wars. Although tribal and territorial wars between primitive groups continued as they had for centuries, the largest wars were between and among Second Wave nations as they struggled for dominance. The result was a world in which there was a dominant Second Wave civilization and a subordinate set of First Wave colonies. Today, however, the Tofflers see the world speeding toward a trisected world in which there are three waves in conflict: the original First and Second Waves contrasted against and competing with a newly developing Third Wave, which is characterized by high-speed information processing.[v]

This new Third, or Information, Wave is greatly affecting our lives. Family, religion, culture, politics, business, leadership, values, sexual morality, and epistemology are evolving as they did during the first two Waves. The Tofflers claim that to introduce this "…new civilization onto the planet and then expect peace and tranquility is the height of strategic naivete. Each civilization has its own economic (and, therefore, political and military) requirements."[vi] They believe that in this trisected world the First Wave (otherwise known as the Third World) civilizations provide agricultural and mineral resources, and the Second Wave (otherwise known as the newly industrializing countries) civilizations provide cheap labor and mass production. The Third Wave civilization is rising to dominance through the new ways it uses to create and exploit knowledge.

The Tofflers claim that Third Wave nations "…sell information and innovation, management, culture and pop culture, advanced technology, software, education, training, medical care, and financial and other services to the world. One of those services may also turn out to be military protection based on its command of superior Third Wave forces."[vii] They also see Third Wave economies characterized by short runs of highly customized products. Because information is the key resource, jobless rates among unskilled or uneducated workers rise, and old mass production-based corporations collapse as do the labor unions that grew with them. In addition, the family system changes from the nuclear family to one characterized by more single-parent families, remarried couples, childless families, and live-alones.

As a result of the massive changes, the homogeneity of the previous waves is replaced by a heterogeneous Third Wave civilization. And because the new civilization is knowledge-based, the pace of technological change, transactions, and even daily life greatly accelerates. This causes friction because the Second and First Wave civilizations cannot keep up. Also, because Third Wave countries need the other two only as markets, Third Wave countries do more business with each other and use knowledge-based technology to do many labor-intensive tasks faster, better, and more cheaply than Second Wave countries.

This phenomenon threatens to break many existing linkages between rich and poor. But, the Tofflers point out, the linkages cannot be completely broken because it is not possible to stop pollution, disease, and especially immigration from penetrating the borders of the rich. Thus tensions will continue to rise and the "…new civilization will fight to establish global hegemony, just as Second Wave modernizers did with respect to the First Wave premodern societies in centuries past."[viii]

The Tofflers conclude by stating that "…the historic change from a bisected to a trisected world could well trigger the deepest power struggles on the planet as each country tries to position itself in the emerging three-tiered power structure. Trisection sets the context in which most wars from now on will be fought. And those wars will be different from those most of us imagine."[ix] (The implications of technology will be discussed in the section on the Revolution in Military Affairs below.)

## SAMUEL HUNTINGTON'S "CLASH OF CIVILIZATIONS"

The noted political scientist, Samuel Huntington, also postulates a clash of civilizations but his is far different and more conventional (though potentially no less bloody) than is the Tofflers'. Huntington's thesis is:

> …that the fundamental source of conflict in this new world will not be primarily ideological or primarily economic. The great divisions among human kind and the dominating source of conflict will be cultural. Nation states will remain the most powerful actors in world affairs, but the principal conflicts of global politics will occur between nations and groups of different civilizations. The clash of civilizations will dominate global politics. The fault lines between civilizations will be the battle lines of the future.[x]

There are several key terms which one must understand to understand Huntington's thesis. The first is *civilization*. To Huntington a civilization is a "cultural entity" and "the highest cultural grouping of people and the broadest level of cultural identity which people have short of that which distinguishes humans from other species."[xi] He says that the traits which define a civilization include not only such common elements as language, religion, history, customs, and institutions but also, and perhaps more importantly, the subjective identification by each member of the civilization as to which civilization he or she belongs. He points out that people can have several levels of identification such as being a New Yorker, an American, a Methodist, a Christian, and a Westerner. But the highest identity is to a civilization.

The second key Huntington term is *fault line*. Simply put, a fault line is the area of the world where civilizations overlap. The former Yugoslavia is a prime example of an area along a fault line because it is in this area where the peoples of three civilizations intermingle.[xii]

In his writing, Huntington identifies seven or eight civilizations—Western, Confucian, Japanese, Islamic, Hindu, Slavic-Orthodox, Latin American, and possibly African—and he goes into some detail about why these civilizations will clash. His first reason is that the differences among the various civilizations are not only real but that they are basic, e.g., historical experience, religion, language, cultural values, and traditions. Second is that the technological revolution has made the world a smaller place, bringing peoples of the various civilizations into greater contact through migration and travel. Third, economic modernization and social change are separating people from local sources of identity such as the family, tribe, and even nation-state. Religion, one of the hallmarks of the various civilizations, has moved to fill this gap. Fourth, the growth of "civilization-consciousness" has been enhanced by the West. Huntington says that the West is at the peak of its power, and it is both admired and rejected. Thus, people are looking for non-Western alternatives to Western ways. Fifth, because civilizations confer identity on people, conflicts are less easily resolved through compromise. Finally, is the growth of economic regionalism and the resulting regional economic blocs. This reinforces civilization-consciousness and the belief that regional economic blocs may succeed only if they are rooted in a common civilization. Thus Huntington argues that the:

> ...clash of civilizations occurs at two levels. At the micro-level, adjacent groups along fault lines between civilizations struggle, often violently, over control of territory and each other. At the macro-level, states from different civilizations compete for relative military and economic power, struggle over the control of international institutions and third parties, and

competitively promote their particular political and religious values.[xiii]

In this way, Huntington not only explains the conflict in Bosnia but also the economic conflict between the United States and Japan.

Huntington goes on to give a history of the clashes of various civilizations that have drawn the fault lines. He focuses on the history that created the boundary between the Western Christian and Slavic Orthodox civilizations, between Western Christianity and Islam, between Slavic Orthodoxy and Islam, and between Islamic civilization and both Hindu and Confucian. He closes with a discussion of the antipathy between Japan and America that he alleges is cultural and not racial.[xiv]

Finally, Huntington looks at some phenomena growing out of his analysis. The first is that which he calls "the West versus the Rest." He sees Western civilization at the height of its power relative to the other civilizations. The superpower opponent of the West has disappeared and conflict among the countries of the West is unthinkable. Except for Japan, there is no economic challenger on the horizon. This has given rise to a situation where the world community really means a world order reflecting Western values and interests. This situation naturally has produced resentment among peoples and states of other proud civilizations. States of other civilizations have three choices: join the West, as Japan seemingly has done; retreat into isolation, as have Burma and Iran; or attempt to "balance" the West by modernizing but not Westernizing and cooperating with other non-Western states, as China seemingly is trying to do.[xv]

The second phenomenon is that of the "torn countries" which other authors have called "failed states." These are states that straddle the fault lines separating the various civilizations. The Soviet Union, Yugoslavia, Turkey, and Mexico are examples of this phenomenon. These countries must redefine their civilization identities to effectively cope with change. To do this they must meet three requirements: have political and economic elites enthusiastic about making the change, have a public willing to acquiesce in the change of identity, and have the

dominant groups in the receiving civilization willing to receive the new state.[xvi]

The third phenomenon is that of the connection between the Confucian and Islamic civilizations. Huntington argues that the most anti-Western civilizations are the Confucian, led by China, and the Islamic. Both are acquiring arms, especially weapons of mass destruction. In addition, China (and to a lesser extent North Korea) is cooperating with Islamic states to promote acquisition of weapons and technologies designed to counter the Western military superiority.[xvii] In his conclusions on the implications for the West, Huntington does not argue that civilization identity will replace nationalism or the loyalty to the nation-state; instead, he argues that civilization-consciousness is increasing and that this consciousness will replace ideology as the dominant form of conflict. He goes on to conclude that this result in the "paramount axis of world politics will be the relations between 'the West and the Rest.'"[xviii] Although he does not claim the inevitability of major conflict, he does believe that it is in the interests of the West to promote cooperation and reduction of tension with the other civilizations, especially the Confucian and Islamic, to prevent or ameliorate conflict. Although he urges Western nations to maintain their military strength to protect their interests, perhaps more importantly he urges greater study and understanding of the other civilizations to find areas of commonality.[xix]

## ROBERT KAPLAN'S "THE COMING ANARCHY"

While the Tofflers and Huntington look at the world from on high (top down), Robert Kaplan looks at it from the perspective of the nation-state (bottom up). His thesis is that some nation-states are becoming ungovernable and are descending into anarchy. When that hap-pens, if they are important regional states such as Mexico or if several less important states do so simultaneously, there will be adverse consequences for the world community. The important states that he sees with the potential to decline into anarchy include China, Mexico, India, Pakistan, Indonesia, Nigeria, and Iran.[xx]

Kaplan first expounded his thesis in an article in the February 1994 issue of *Atlantic*

*Monthly.* In that article he paints a dark picture using anecdotal evidence based on his travels. He concentrates on the west coast of Africa in which he describes African nations with governments that have no control over the hinterlands and control the capital city during the day but not at night. This is caused by the mass migration of peoples from the countryside to the capital city. He describes Lagos, the capital of Nigeria and West Africa's largest (population 90 million) and most prosperous state, as an example of urban dysfunction because of its crime, pollution, and overcrowding. And it will only get worse as the population doubles in the next 25 years. Compounding the problems brought on by migration is the fact that Africa's nation-states were created by the European colonists who drew boundaries to suit themselves instead of boundaries that follow natural geographic, ethnic, or economic groupings. As a result, many of these imposed boundaries are starting to crumble.[xxi] The spread of disease in Africa further complicates the problem of disintegrating frontiers. The extreme prevalence of malaria and AIDS (two-thirds of those whose blood is HIV positive are in Africa) is creating an "impenetrable boundary…that threatens to isolate the continent as a whole."[xxii]

Kaplan then examines the key factors he believes are necessary to understand the events of the next 50 years. In CGSC terms, Kaplan sees the coming of anarchy as a trend. Environmental scarcity, cultural and racial clashes, geographic destiny, and the transformation of war are the forces leading to the trend. He then examines each in detail.

First, Kaplan believes the environment is a hostile power. He sees the lack of resources as a critical factor leading to the ungovernability of places like Nigeria, India, and Brazil. He believes that the political and strategic impact of surging populations, spreading disease, de-forestation and soil erosion, water depletion, air pollution, and, possibly, rising sea levels in critical, overcrowded regions like the Nile Delta and Bangladesh—developments that will prompt

mass migrations and, in turn, incite group conflicts—will be the core foreign-policy challenge from which others will ultimately emanate, arousing the public and uniting assorted interests left over from the Cold War.[xxiii]

When writing about the second factor, cultural and racial clashes, Kaplan agrees with Huntington that future conflicts will arise out of cultural conflicts. He adds that because of the environmentally caused mass migrations, national borders will mean less, and political power will devolve on the less educated and less sophisticated groups. Therefore to these uneducated but newly empowered masses, the borders that matter will be the ones defined by culture and tribe.[xxiv]

The third factor that Kaplan sees as a force is geographic destiny. Today's maps that divide the world into cities, states or provinces, and nations do not describe geographical reality, the realities of culture and sub-culture, or even sub-sub-culture. The city maps do not include the shanty towns of Rio or Lagos or Mexico City. The maps of Turkey and Iraq do not describe the realities of the Kurds. Thus, "Identity in Turkey, as in India, Africa, and elsewhere, is more complex and subtle than conventional cartography can display."[xxv]

Finally, Kaplan asserts that to fully understand the political and cartographic ramifications of the transition from nation-states into "jagged-glass pattern of city-states, shanty-states, nebulous and anarchic regionalisms—it is necessary to consider, finally, the whole question of war."[xxvi] Kaplan echoes Martin Van Crevald when he says that war will no longer follow the old rules of state warfare. War will become more like what the military used to call low intensity conflict, and now lumps under the rubric of operations other than war (OOTW). In fact he claims that war and crime may become indistinguishable. "Future wars will be those of communal survival, aggravated or, in many cases, caused by environmental scarcity. These wars will be subnational, meaning that it will be hard for states and local governments to protect their own citizens physically."[xxvii]

# FORCES IN THE INTERNATIONAL SECURITY ENVIRONMENT

In terms defined in Lesson 1, the three thinkers described above are discussing global trends as they see them, and they describe selected forces that support the trends they describe. However, there are other forces at work in the security environment with which the leaders of the United States must deal. Remember from Lesson 1 that forces aggregate to form trends.

## Terrorism

With the bombing of the World Trade Center in 1994, a major terrorist act was, for the first time, committed in the United States. Terrorism, a shorthand definition of which is the calculated use or threat of violence to modify political behavior, is not a creature of the Cold War. Terrorism has changed only slightly as a result of the end of the Cold War, and the change has not been for the better. Predictably, with the removal of the constraints imposed by superpower policing, political violence has proliferated. Thus terrorism, being an effective and particularly inexpensive form of political violence, thrives in the chaotic conditions of the 1990s. While there are fewer terrorist groups receiving sustained support from national governments than there were 10 years ago, there are more groups and individuals practicing terrorism in pursuit of goals ranging from ethno-national identity and sectarian primacy through single issue social causes and international organized criminal activity.

The near term future is no brighter. The weakening of the administrative state through ethnic and economic rivalries and the struggles to develop culturally acceptable yet functional governmental forms to replace failed authoritarian or bankrupt regimes offer nearly limitless "causes" to justify the practice of terrorism. These same trends inhibit international cooperation by intelligence and police forces trying to contain terrorist activity. Simultaneously, the world is awash in weapons while rapid urbanization (discussed below) increases the strain on individuals prone to violent expression of emotional instability. These conditions, taken along with the spread of the means to build weapons of mass destruction, and the even more menacing spread of the knowledge to create and employ such weapons (also discussed below), leave little basis for optimism concerning a reduction in the practice of terrorism in the early 21st Century.

## Urbanization and Refugees

Kaplan discusses one aspect of this force in the contemporary world, and whether or not it leads to the coming of anarchy, it is a force with which many countries must deal. Modern agricultural technology has created the conditions by which a progressively smaller number of farmers are needed to feed populations. This fact coupled with greater mobility and the information explosion discussed below has fueled a mass migration of former peasants with few skills to the larger cities where they look for work. The result is a population explosion in the major urban centers of many countries that have insufficient infrastructure such as schools, roads, housing, water and sanitation. The problem is compounded by the fact that many of these migrants are having more children than they can raise on their meager incomes. The result is the squalid slums and shanty towns that are the features of many great cities such as Shanghai, Mexico City, Rio de Janeiro, Cairo and Calcutta.

Refugees who are fleeing from the "four horsemen of the apocalypse" in such diverse places as Bosnia, Somalia, Cambodia, Cuba, Haiti and Rwanda also are straining the resources of neighboring countries and world aid donors. There seems to be no solution that is acceptable to the "world community" to solve this problem, so it appears that refugees fleeing their homes will be a continuing feature of our nightly news programs.

## Famine

Famine has always been a feature of the international environment. However, with the arrival of modern communications the faces of famine victims can be broadcast into our homes nightly. There are two basic causes: war and natural or manmade disasters. The usual cause is natural disasters with flood and droughts as the primary causes. When the two combine, as

in Somalia, famine can be especially bad and the efforts at relief often will restore military force to protect the humanitarian organizations providing the relief.

## Narco-trafficking

Although at first it was primarily fueled by large demand in the United States, the international narcotics trafficking business continues to grow steadily as demand in other countries increases. No longer can many countries simply say it is a problem of demand in the United States. The two major narcotics, heroin and cocaine, are produced from plants grown in different parts of the world. Poppies that produce opium which is distilled into heroin come from two major areas: the Golden Triangle (tri-border area of Burma, Thailand, and Laos) and the Golden Crescent (Afghanistan and Pakistan). Coca leaf from which cocaine is refined is grown only in the Andean Ridge of South America. Even though each drug presents different problems for law enforcement, a common problem is that law enforcement is a national responsibility while narco-trafficking is an international problem. The profits are so immense that organizations have grown in some areas to rival national governments.

## Proliferation

Proliferation of weapons of mass destruction (WMD)—including chemical, biological, and nuclear weapons—is a recent phenomenon. During the Cold War, both the United States and the USSR had an interest in controlling the spread. However, the demise of the Soviet Union has allowed some slippage of controls. The economic problems experienced by the Soviet successor states have created a situation where those who worked on Soviet WMD programs are no longer profiting as they did. This creates an economic incentive to sell either the weapons, weapon grade material, or technology. In addition, the information explosion discussed below has made the spread of the technology easier. A third factor is that several states who have the weapons, the technology, or both are willing to sell for a profit. The result is that there is a high probability of proliferation and, with greater availability, a higher probability of use either by governments, factions, or terrorists.

## Information Explosion

One can safely say that more information through more media is available today than any time in history. That is not such an extraordinary statement because the invention of paper, moveable type, the printing press, radio, and television all increased the amount and availability of information. What is new and, in the Tofflers' view, revolutionary is the explosion of media and the amount of information now available to everybody because of the microchip, which has led to what is now called the information highway. This explosion has caused a profound change in the lives of everybody in the world, and it is a change that even the Tofflers may not fully comprehend.

## Technological Innovation

Actually, the information explosion is only a symbol of the broader force of rapidly advancing technological change. A century ago a new invention lasted for at least a century before another invention made it obsolete. Today, a new invention makes a previous invention obsolete in a decade or less. For example, the replacement of records by reel-to-reel tapes, which were replaced by eight-track tapes, which were replaced by cassette tapes, which were replaced by compact discs, all occurred within a span of 30 years. And the replacement time seems to shrink exponentially. The pace of technological revolution, as the Tofflers have shown, will have profoundly unsettling impacts both on the strategic environment and the manner in which a nation responds to the strategic environment in the informational, political, economic and military realms.

## Internationalization of Business

Many forces discussed above have affected the growth of the international business community. Certainly the discrediting of communism almost everywhere has opened new avenues of business endeavor, while the information and technological revolutions have created the means for a single organization to control production, transportation and marketing

on a world-wide scale. The difficulty in defining what is an American-made car is an excellent example of the phenomenon. Today a Ford Contour, which was designed by engineers in Europe and the United States linked by computer, can be assembled in Kansas City from parts manufactured in Canada, Japan, Mexico, and the United States before it is sold worldwide. The same story can be found in almost every industry. Even in agriculture, the story is similar. The "green revolution" in India was made possible by genetically engineered rice strains developed in the United States. This caused the twin phenomena of a search for government structures to replace the nation-state and for the means to reinvigorate the nation-state.

## Growth of National, Transnational, and Sub-State Actors

The demise of the Soviet Union and the resultant loosening of the bonds of restraint in the international system coupled to the forces listed above has led to an explosion of importance given to actors in the international system. The number of nation-states in the United Nations has grown from around 150 in 1989 to more than 180 today. Each nation-state places demands on the international community, has its own interests to pursue and makes it more complicated to conduct international relations. Even more important, however, has been the growth of actors above and below the nation-state. Transnational actors especially have become more important in recent years. International business organizations are just one example. Others are the myriad of private volunteer organizations that are now involved in every international crisis, whether it is famine in Somalia or civil war in Bosnia. A more recent phenomenon is the sub-state actor. These include various ethnic, religious, and tribal groups that are at play in the view of Huntington and Kaplan. Attacked from above and below, some wonder that the nation-state system, which has been the common feature of the West's international environment since enlightenment, has been able to survive as well as it has.

## TRENDS IN THE INTERNATIONAL SECURITY ENVIRONMENT

With these forces in mind, let us now turn to the trends made up of these forces. Besides the trends described by the Tofflers, Huntington, and Kaplan, there are four others that are worthy of study: interdependence, diversification of threats, rejection of western values, and the revolution in military affairs (RMA).

### Increasing Interdependence

Those who see interdependence, also known as mutual dependence, as a positive trend postulate that if nations depend on each other the threat of war lessens. The best known type of uncoerced interdependence is in the economic realm. The forces of information explosion, technological innovation, and internationalization of business are all prime reasons for the increase in economic interdependence. Examples abound with the Ford Contour being only one. While the mobility of factors of production and international trade of finished products is certainly increasing, the effect on the nation-state's ability to perform its traditional functions is not yet clear.

Social interdependence (the sensitivity of one society to social events taking place in other societies) is also increasing because of the information explosion. The potential impact of the transmission of ideas across national boundaries is complex and difficult to analyze, yet we see anecdotal evidence every day. Just consider the French attempts to limit the number of U.S. movies shown in France by attempting to support French filmmakers during the recent GATT negotiations.

Policy interdependence (the impact of decisions taken by one actor in the system on policy decisions taken by other actors elsewhere in the system) is nothing new. What is new is that as governments penetrate more into the lives of their citizens through the forces of information explosion, urbanization, and technological innovation, the potential for an increased effect on other governments, either intended or unintended, also increases. This shows in the effect the women's movement within the United States has had on the policy decisions in many far different cultures with respect to women's issues. One example of this

is the movement within African nations to abolish female genital mutilation.

The effect of this trend seems to be to limit the room for independent action by nation-states in many areas that they have traditionally seen as sovereign. This trend has been resisted by many states such as China that sees, for example, U.S. opposition to Chinese human rights policies and a U.S. threat to impose increased tariffs because of Chinese failure to protect U.S. copyrights as infringements on Chinese sovereignty.

## Diversification of Threats

From the foregoing discussion, clearly there has been a quantum shift in the nature of the threats to U.S. interests since 1989. During the four decades of the Cold War, the single dominant threat was the Soviet Union. Since the demise of the Soviet Union, one monolithic threat has degenerated into multiple threats that individually are less threatening to U.S. interests. It is still unclear whether the total threat is more or less threatening. Because the vast majority of threats are regional nature, this paper will not discuss individual threats.

## Rejection of Western Values

Another trend that has appeared is the rejection in many societies of western values. First apparent as a result of the Iranian Revolution, this trend has expanded to many non-Islamic societies. The societies or groups which reject Western values see them as materialistic and self centered. They see Western society as based too much on the rights of individuals and not sufficiently based on the responsibilities of individuals to their societies. The rejectionists seek a return to spiritual and societal-based value structures. Thus, one sees them demanding of their adherents subordination to values and individual behaviors that are set by a higher, usually religious, authority.

## Revolution in Military Affairs

The final trend discussed is what is variously known as the military technical revolution or the revolution in military affairs (RMA). The later

term will be used in this course. Probably the best definition is given by Andrew F. Krepinevich. He argues that:

> (RMA) occurs when application of new technologies into a significant number of military systems combines with innovative operational concepts and organizational adaptation in a way that fundamentally alters the character and conflict. It does so by producing a dramatic increase—often an order of magnitude or greater—in the combat potential and military effectiveness of armed forces.
>
> Military revolutions comprise four elements: technological change, systems development, operational innovation, and organizational adaptation.[xxviii]

There has been a plethora of literature written on the RMA. It would be fruitless to capture all the ideas in one paper. This section will discuss only a representative sample; however, one theme runs throughout all sides of the issue: the change coming in military affairs is truly revolutionary and will affect the entire military establishment. This trend is composed primarily of the forces of the information explosion and technological innovation juxtaposed over the forces of growth of transnational and sub-state actors, terrorism, proliferation, and the increase in conflicts.

The writers on the RMA generally fall into two categories: those that believe that the RMA is a boon to the United States and those that do not. On the positive side, Michael Mazarr believes the United States should use certain principles for defense planning which are supported by the RMA:

- Information warfare
- Use high tech non-lethal weapons for OOTW
- Synergy through jointness
- Non-linear combat
- Disengaged combat
- Blur the boundary between military and civilians.[xxix]

General Gordon R. Sullivan, former Chief of Staff of the U.S. Army, basing his views on Toffler, believes that the Army can and is currently responding to the challenges of the RMA. He believes that the Army today is using the "tools" of the information age. He sees information age armies conducting:

> ...operations resulting in the near simultaneous paralysis and destruction of enemy forces, war-making capability, and information networks throughout the depth of the theater. Armies in the information age will develop a shared situational awareness resulting from having common, up-to-date, near-complete friendly and enemy information, distributed among all elements of a task force.[xxx]

David Jablonsky believes that the doctrinal framework of all the military services, but especially of the Army, are sufficiently flexible to contend with the change in technology while simultaneously maintaining important elements of continuity. For example, he points out some authors believe that there is no longer much utility to the separation of the strategic, operational and tactical levels of war. Jablonsky takes a middle course in demonstrating his view that although the three levels likely will be flattened (a single event or situation could occur at all three levels), they still have doctrinal utility.[xxxi]

On the other hand the pessimists believe that either the United States is not capable of effectively responding to the RMA or, because of the information explosion, small countries or groups can use the RMA for their purposes. Drawing from history, Krepinevich believes that it is not certain that the advantages of the RMA will accrue to the United States. He seems to directly contradict Sullivan by saying that:

> First, the United States should anticipate that one or more competitors seeking to exploit the coming rapid and dramatic increases in military potential may soon arise… Second, continued American technological and operational leadership is by no means assured… Third, it is by no means certain that competitors will follow the same path as the United States. Different security requirements, strategic cultures, geostrategic postures, and economic situations will lead different competitors in different directions.... Fourth, it is not clear that the United States can rely on the cost of competition acting as an effective barrier to others. Although most military revolutions have raised the cost of "doing business," sometimes dramatically, there have been significant exceptions…[xxxii]

Furthermore, Krepinevich believes that the information revolution that has lowered the cost of information-related technologies may lower, not raise, the cost of competing with the United States. Other authors develop the themes raised by Krepenevich.

A.J. Bacevich, for example, agrees with Krepinevich and goes on to say that the cause of pessimism is the "mind-set" of the generation of military officers who fought in Vietnam and then devoted their careers to rebuilding the military that fought so well in the Persian Gulf conflict. He claims that the military is single-mindedly pursuing the idea that the Information Age has rendered traditional approaches to warfare obsolete. He points out that it is natural for these soldiers to be determined to preserve the fruits of victory and protect their cherished institution. He wrote:

> Yet if that determination feeds an illusion that the "revolution" glimpsed in Desert Storm has supplanted other sources of change—political, social, and cultural as well as technological—Vol. that have shaped the character of modern warfare, it is likely to prove dangerously misleading. Without doubt,

the implications of the Information Age loom large. Yet their impact on warfare can hardly be assessed in isolation from other pertinent trends: the erosion of state sovereignty at the hands of supra- and sub-national forces; the resurgence of ethnicity and religious belief as sources of conflict; the evidence of cultural disorder and loss of confidence throughout the West generally and in the United States specifically. [xxxiii]

Jeffrey Cooper sees the U.S. as potentially making three crucial errors: trying to find "silver bullet" technology on which to build the RMA; directing attention away from critical issues of and relationships among purpose, strategy, doctrine, operational innovation, and organizational adaptation; and thus wasting scarce resources on new programs that are irrelevant to future security challenges. [xxxiv]

Jerome H. Kahan and Bruce Hoffman believe that small states will use the RMA for their purposes. Kahan argues that small states who will likely acquire nuclear weapons will be willing to run risks, which the United States rationally would see as unacceptable, to deter action by the United States. [xxxv] Hoffman sees an increasing possibility of terrorists using weapons of mass destruction because of the growth of fanatical terrorist groups who are more willing to kill masses of people, the increasing amateurism of terrorists, and the increasing sophistication of terrorist groups. [xxxvi] Finally, John Pike sees the increasing use of space by potential threat countries. He does not believe countries other than the United States or Russia have the capability to use space for warfighting, but he does believe that threat countries can cheaply use commercially available multispectral imagery and navigation aids for military planning. Finally, he believes that threat countries, if they desire to exploit space for warfighting, could build an ASAT system. [xxxvii]

Many of the themes discussed above have been captured for the Army's key modernization document, TRADOC Pam 525-5, *Force XXI Operations*. The forces and trends for this document were focused on U.S. Army operations in the 21st century. Thus, a summary of the ideas contained in the Pam serves as a useful summary for this paper. *Force XXI Operations* assumes that the National Security and National Military Strategies (examined in the next lesson) will not change markedly. Instead, what will change markedly is technology and, as a result, doctrine. The document asserts that the key change is the information revolution. The Army asserts that:

> …future information technology will greatly increase the volume, accuracy, and speed of battlefield information available to commanders. Such technology will allow organizations to operate at levels most adversaries cannot match, while simultaneously protecting that capability.

> …future technology will require the Army to reassess time-honored means of battle command—to recognize that in the future, military operations will involve the coexistence of both hierarchical and internetted, non-hierarchical processes. Order will be less physically imposed than knowledge-imposed. Combinations of centralized and decentralized means will result in military units being able to decide and act at a tempo enemies simply cannot equal. [xxxviii]

With that assertion as background, the document then describes the future strategic environment. Its basic theme is that the "world's geopolitical framework will continue to undergo dramatic restructuring, accompanied by a wide array of economic, technical, societal, religious, cultural, and physical alterations." [xxxix] It then goes on to list several elements or forces that will make up this trend of instability:

a. The nation state-system is under attack and the balance of power is unstable in much of the world.

b. Nationalism has replaced communist ideology as the leading cause of interstate and intrastate conflict.

c. Much of the non-Western world rejects Western political and cultural values.

d. The gap between the rich and poor states has widened; thus, the temptation to use military force to redress perceived economic imbalances will be great.

e. Population growth coupled with natural disasters can cause mass migrations of refugees.

f. The ability of some nation-states to govern themselves is questionable.

g. Rapid improvements in technology are disrupting established norms and patterns of behavior.

h. Environmental degradation may add to future instability.

i. Rapid advances will continue to be made in the way we collect, communicate, and use information.[xl]

As a result, a new threat spectrum model needed to be developed. It is based on a wide range of threats described below:

a. Nonmilitary threats resulting from human occurrences and experiences that may require a military response.

b. Non-nation threats can arise from subnational groups, anational groups, and metanational groups.

c. The types of armies that the U.S. could face in future conflicts are:

(1) Small, poorly trained and equipped internal security forces common to much of the less-developed world.

(2) Infantry-based armies that comprise the bulk of the armies in the less-developed world.

(3) Armor-mechanized-based armies that are predominant in most industrial nations.

(4) Complex, adaptive armies that only developed nations can maintain.

The Pam envisions that future conflicts may involve simultaneous operations against foes from all these categories. The challenge will be for the technologically advanced army to face foes that use unconventional strategies such as terrorism, insurgency or partisan warfare to overcome technological weaknesses. It goes on to argue that the most serious challenge to the U.S. military will come from the process of proliferation of weapons and technology. Three key areas of concern are weapons of mass destruction, information operations and space control.[xli]

The discussion of the future environment concludes with a description of the dominant aspects of the future conventional battlefield which are:

- *Battle command*. Although command will remain an art and science, the art will become more and more necessary because commanders must face situations and scenarios which cannot be predicted with any certainty. Advances in information management will facilitate the horizontal integration of battlefield functions and aid commanders in tailoring and arranging forces on land. These same new advances will allow nonhierarchical dissemination of intelligence, targeting and other data. All this will allow leaders to be more widely dispersed, resulting in the empty battlefield phenomenon.[xlii]
- *Extended battle space*. The trends all point to an increase in the depth, height and breadth of the battlefield. This may cause the traditional relationship between fire and maneuver to undergo a transformation.[xliii]

- *Simultaneity*. The RMA may transform military campaigns from sequentially phased operations to the capability to achieve multiple operational objectives nearly simultaneously.[xliv]
- *Spectrum Supremacy.* Information technological advances will ensure that future operations will unfold before a global audience. Thus, tactical actions and hardships of soldiers and civilians will have an increasing impact on strategic decision making.[xlv]
- *Rules of War.* Warfare is becoming less civilized relative to recent history. The tactics of taking civilians or UN soldiers for hostages and the threat of chemical weapons indicates that actions once regarded as criminal are accepted if performed by a state or non-nation force. These will provide difficult challenges.[xlvi]

The document concludes with the statement that the "days of the all-purpose doctrinal threat template are gone just as the days of a single-prescription Army doctrine are gone."[xlvii]

## ENDNOTES

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